Ordering number : EN2875A

Monolithic Linear IC

LA7214

VCR-Use Automatic Channel Selection Peripheral

Overview

The LA7214 is a VCR-use automatic channel selection peripheral IC that contains a sync separator, a video buffer, and a comparator.

Functions and Features

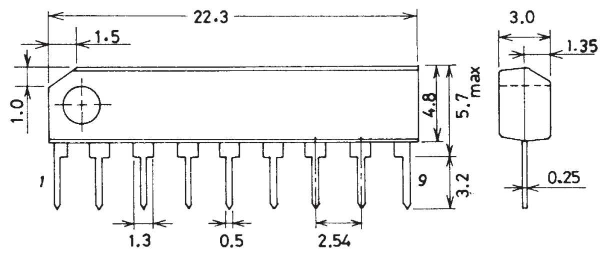
- Sync separator
- Video buffer
- Comparator
- Recommended supply voltage : 5V
- Sync separator, comparator output of open collector type (R_L=10kΩ), negative polarity output.

Package Dimensions

unit: mm

3017C-SIP9

[LA7214]



SANYO: SIP9

Specifications

Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V_{CC} max		7.0	V
Allowable power dissipation	Pd max	Ta≤75°C	150	mW
Operating temperature	Topr		–15 to +75	°C
Storage temperature	Tstg		–40 to +125	°C

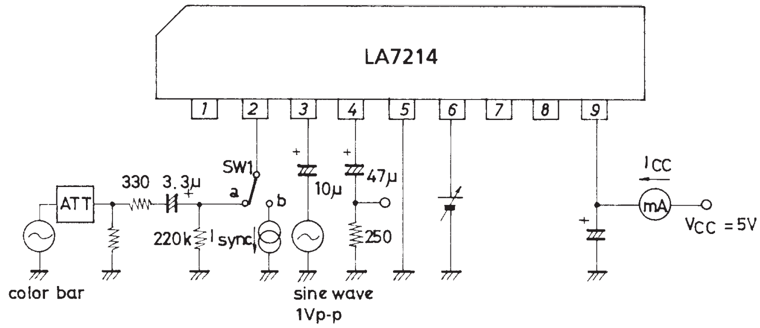
Operating Conditions at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	V_{CC}		5.0	V
Operating voltage range	V_{CC} op		4 to 6	V

Operating Characteristics at Ta=25°C, V_{CC}=5V

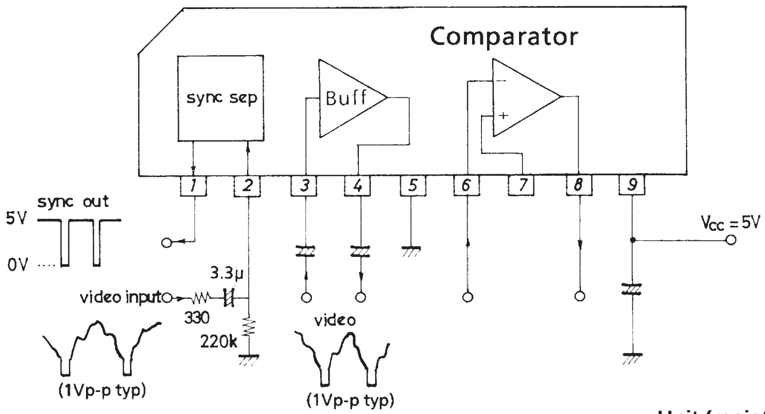
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Circuit Current	I_{CC}	No load	4	6.5	9	mA
Sync separation operating current	I_{SYNC}	SW1=b		85		µA
Sync separation minimum input level	V_I min	Color bar signal 1Vp-p=0dB, SW1=a		–12		dB
Buffer amp gain	G_1	R_L=240Ω, V_{IN}=1Vp-p, 500kHz	–2	–1	0	dB
Buffer amp gain	G_2	R_L=240Ω, V_{IN}=1Vp-p, 5MHz	–2	–1	0	dB
Comparator reference voltage	V_7			2.5		V
Hysteresis amount	ΔV_7	$\Delta V_7 = V_{7H} - V_{7L}$		50		mV
Output DC level	V_{1H}	No load	4.9			V
Output DC level	V_{1L}	No load			0.2	V
Output DC level	V_{8H}	No load	4.9			V
Output DC level	V_{8L}	No load			0.2	V

Test Circuit



Unit (resistance : Ω, Capacitance : F)

Sample Application Circuit



Unit (resistance : Ω, Capacitance : F)